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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,947	09/30/2003	James Gregory Schroth	GP-303489 5301	
7590 01/09/2006		EXAMINER		
KATHRYN A MARRA			KASTLER, SCOTT R	
General Motors	s Corporation			
Legal Staff, Mail Code 482-C23-B21			ART UNIT	PAPER NUMBER
P.O. Box 300			1742	
Detroit, MI 48265-3000			DATE MAILED: 01/09/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)					
Office Astinus Com	10/674,947	SCHROTH ET AL.					
Office Action Summary	Examiner	Art Unit					
	Scott Kastler	1742					
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period is a failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timwill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE!	I. nely filed the mailing date of this communication O (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on							
	—· s action is non-final.						
3) Since this application is in condition for allowa		scaution as to the morite is					
closed in accordance with the practice under E							
	-x parte Quayre, 1935 C.D. 11, 45	33 O.G. 213.					
Disposition of Claims							
• • • • • • • • • • • • • • • • • • • •	4) Claim(s) 1-10 is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.							
6) Claim(s) <u>1-10</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/o	r election requirement.						
Application Papers							
9) The specification is objected to by the Examine	er.						
10)⊠ The drawing(s) filed on 30 September 2003 is/s		ted to by the Examiner					
Applicant may not request that any objection to the	•	•					
Replacement drawing sheet(s) including the correct			١				
11) The oath or declaration is objected to by the Ex			<i>)</i> .				
Priority under 35 U.S.C. § 119							
<u> </u>							
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:							
1. Certified copies of the priority document							
2. Certified copies of the priority document							
3. Copies of the certified copies of the prior	· ·	d in this National Stage					
application from the International Bureau	• • •						
* See the attached detailed Office action for a list	of the certified copies not receive	d.					
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Attachmont/c\							
Attachment(s) 1) X Notice of References Cited (PTO-892)	∆ □	(DTO 442)					
2) Notice of Praftsperson's Patent Drawing Review (PTO-948)	4)	te					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) 🔲 Notice of Informal Pa	atent Application (PTO-152)					
Paper No(s)/Mail Date	6)						

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rashid et al in view of Spence et al'275. Rashid et al teaches a method of stretch, or "hot blow" forming of a superplastic aluminum alloy sheet through the application of pressurized working gas against one side of the sheet of aluminum to stretch it against a heated forming surface as a succession of such workpieces comprising preheating the workpieces to between 400 and 500 degrees C (see claim 1 for example) "predetermining" a time gas pressure application reference schedule including step wise increments in pressure (which could mean selection of any time and pressure application relation) for application at a temperature of between 400 and 500 degrees C (see the claims for example) and adjusting the gas pressure application to maintain said schedule, thereby showing all aspects of the above claims except the continual monitoring and measurement of the temperature during the process, since the recitations that the measured temperature is employed for "controlling the application of gas pressure" or that the pressure application is adjusted in response to a measured temperature difference with respect to a reference temperature are not limiting since without any recitation of the relationship between the measured or reference temperature and the recited pressures any adjustment of the pre4ssure while monitoring the temperature would meet these requirements. Spence et al'275 teaches that in order to improve formability in hot blow forming processes, it was known at the time the

invention was made to continuously monitor the temperature of a hot blow forming process, (see paragraph [0007] for example). Because improved formability would also be desirable in the process of Rashid et al, motivation to additionally continuously monitor the temperature of the process, as taught to be desirable by Spence et al'275, would have been a modification obvious to one of ordinary skill in the art at the time the invention was made. It is noted however, that a more specific recitation of how the measured temperature is employed to adjust the applied pressure (such as stating that the pressure is adjusted to equal the pressure corresponding to the measured temperature on the pre-determined reference schedule), would overcome the above rejection, at least because neither of Spence et al'275 or Rashid et al recite or fairly suggest this step.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Each of Spence et al'761, Schroth, Yasui'987, Yasui'954, Kim et al, Saunders et al and hammer et al are also cited as further examples of prior art hot blow, or stretch forming processes.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Kastler whose telephone number is (571) 272-1243. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Scott Kastler Primary Examiner Art Unit 1742

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